

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



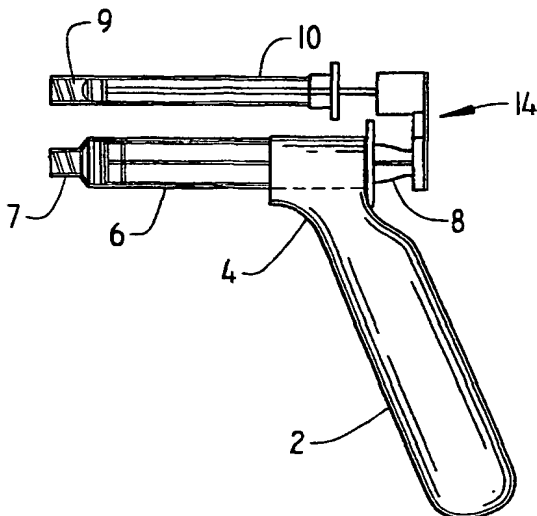
(43) International Publication Date  
19 April 2001 (19.04.2001)

PCT

(10) International Publication Number  
**WO 01/26712 A1**

- (51) International Patent Classification<sup>7</sup>: A61M 5/00 H. [US/US]; 15 Hounds Ditch Lane, Duxbury, MA 02332 (US).
- (21) International Application Number: PCT/US00/26243
- (22) International Filing Date: 6 October 2000 (06.10.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/158,302 8 October 1999 (08.10.1999) US
- (71) Applicant (for all designated States except US): HARVEST TECHNOLOGIES CORPORATION [US/US]; 77 Accord Park Drive D-7, Norwell, MA 02061 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): VERKAART, Wesley,
- (74) Agents: CLARK, Conrad, J. et al.; Clark & Brody, Suite 600, 1750 K Street, NW, Washington, DC 20006 (US).
- (81) Designated States (national): CA, CN, JP, US.
- (84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
- Published:**  
— With international search report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: APPARATUS FOR HOLDING AND OPERATING ONE OR MORE SYRINGES



(57) Abstract: Apparatus for supporting a syringe (6, 10) includes a handle portion (2) and a cradle (4). A clip (14) is provided for connecting the plungers (8) of two or more syringes (6, 10), and two or more syringes (6, 10) are operated by placing one (6) in the cradle (4) and attaching the clip (14) to the plungers (8) for simultaneous operation of the plungers (8). The handle portion (2) also forms a cavity for storing the clips (14). The apparatus is preferably used in combination with an applicator tip (12) that combines the outputs from the two or more syringes (6, 10).

WO 01/26712 A1

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/26243

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 5/00

US CL : 604/191

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 604/191

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
NONE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,582,596 A (FUKUNAGA et al.) 10 DECEMBER 1996, See Fig.1 and related text.	1,2,4,5 7-11
X	US 5,179,983 A (CORDNER, Jr. et al.) 19 JANUARY 1993, See Figs 1-5 and related text.	1-4, 7-12
X	US 4,979,942 A (WOLF et al.) 25 DECEMBER 1990, See Figs 1-3 and related text.	1,2,4,7,8 9,10,11
X	US 5,290,259 A (FISCHER) 01 MARCH 1994, See Figs. 1, 7-10 and related text.	1-4,7,9 10,11,12

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 13 DECEMBER 2000	Date of mailing of the international search report 16 JAN 2001
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer MICHAEL J. HAYES Telephone No. (703) 305-5873